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Title: Self-Service Terminals

and

Self-Service Networks

REPLY BRIEF

CERTIFICATE OF MAILING

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Re: Pages 1 - 9 of Examiner's Answer ("Answer" herein)

This section of the Answer repeats material of the Final Office Action. The Appeal Brief addresses this material.

Preliminary Comments on DeLeo Reference

DeLeo discusses presentation of "non transactional messages" (called "advertising" herein) at ATMs and other self service terminals. (Column 3, lines 4 - 16; column 1, lines 39 - 42.)

He states that the advertising can be stored at the ATMs, as on CD ROMs, but he prefers that the advertising be stored remotely

on a server, and then delivered electronically to the ATMs, via satellite. (Column 4, lines 23 - 33. Column 5, lines 12 - 15. Remotely stored messages are stored in database 44 in Figure 2: column 4, lines 52 - 55.)

He states that a given piece of advertising can be sent to one ATM, or to multiple ATMs. (Column 5, lines 1 - 7.) Message processor 28 in his Figures 1 and 2 controls which messages are sent, and to which ATMs. (Column 4, lines 57 - 64.)

Once advertising reaches the ATMs, "configuration files" determine which advertising is presented, at any given time. DeLeo gives several examples:

- -- An advertisement for a fast-food restaurant may be presented between 11 am and 2 pm, that is, during lunch-time.
- -- An advertisement for a movie may be presented between 4 pm and 8 pm.
- -- An advertisement for an automobile may be presented at any time.
- -- Advertising can be selected randomly.
- -- Some advertising may be intentionally selected more than others.
- -- Some advertising can be selected, based on the type of transaction undertaken by the customer of the ATM. For example, if a

customer uses a bank other than the bank owning the ATM, then advertising may be presented suggesting that the customer switch banks.

Significantly, the advertising just described is selected by the configuration file located at the ATM. (Column 5, lines 19 - 60.)

Alternately, the advertising can be selected by a remote computer, which learns facts about the customer at the time of the transaction. For example, that remote computer may learn that the customer has large amounts of money on deposit. The advertising selected could promote expensive automobiles. (Column 5, line 61 et seq.)

The configuration files are constructed by the parties who sponsor the advertising. (Column 6, lines 7 - 10.) That is, the businesses who sponsor the advertising determine when, where, and to whom the advertising is presented, by way of the configuration files.

Initial Comments on Answer

Comment 1

The Answer repeatedly asserts that DeLeo implements targeted advertising at terminals, wherein advertising is selected for presentation based on various criteria. However, Appellant points

out that the claims do not recite that.

For example, independent claims 1, 9, 16, and 22 state, speaking generally, that "environment data" is present, which describes the environment of each terminal. That type of recitation is not shown by DeLeo's selection of advertising.

Comment 2

The Answer agrees, but asserts that the recitation in question is "implicit" in DeLeo, because it makes no sense for DeLeo to advertise for businesses which are not in the neighborhood of the terminal. This reply explains why the Answer's assertion is highly dubious, because advertising is done for many different reasons.

Further, claims 1, 9, and 16 recite two types of "data," namely, (1) "environment data," which describes the environment of each terminal and (2) a subset of the "environment data," which describes nearby businesses.

The Answer has only asserted that the latter type of data is present in DeLeo. Thus, the "environment data" is missing.

Comment 3

The Answer asserts that the latter type of data (that describing nearby businesses) is present in DeLeo in the advertisements which the terminals display. However, this creates a problem in dependent claims, which state that the "data" is used

to select advertising.

The problem is double-counting. The Answer uses the advertising in DeLeo to show the claimed "data" of the parent claim, and then uses the same advertising to show the advertising which was "selected." Claims 7 and 8 provide examples.

Double-counting is not allowed. Each claim element must be shown by a distinct element in the reference.

Further, the Answer's double-counting reading of DeLeo makes no sense. The Answer's reading of DeLeo states that the advertising is selected, based on the advertising. That makes no sense.

End Comments

Reply to Answer, Pages 15 - 17 (Dependent Claim 7)

Claim 7 depends on claim 2, which depends on claim 1. Claims 1 and 7 recite:

- 1. A method of selecting advertisements for display on and/or adjacent to a plurality of self- service terminals comprising the steps of:
- (a) collecting environment data related to the environment of each terminal including the nature of businesses nearby the terminal;
- (b) collecting transaction data indicating the type and time of transactions carried out at the terminal; and
- (c) storing the collected data in a data

warehouse.

- 7. A method according to claim 2, further comprising the steps of
- (e) querying the data warehouse to determine which terminals are located on sites at which a selected business activity is carried out; and
- (f) selecting an advertisement for display which includes content related to that business activity.

Point 1

The Answer is guilty of double-counting.

The Answer is using the advertising in Deleo (ie, the "non-transactional messages") to show both

- -- the "environment data" of claim 1
- and
- -- the "advertisement" of claim 7.

Double-counting is not allowed. Each claim element must be shown in the reference. MPEP § 2131 states:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Point 2

The Brief, beginning on page 14, section entitled "Claim 7," addresses the remainder of the Answer.

Reply to Answer, Page 17 (Dependent Claim 8)

Claim 8 recites:

(e) querying the data warehouse to calculate a statistical distribution of the frequency of different transactions occurring at a terminal.

Appellant points out that the claimed "data warehouse" is that of claim 1, and contains the "transaction data" and the "environment data."

Point 1

The Answer purports to find a "statistical distribution" in DeLeo. However, that supposed "distribution" does not correspond to the "statistical distribution" which is claimed.

The claim recites "a statistical distribution of the frequency of different transactions occurring at a terminal." This means, for example, a compilation of data of the following type:

Transaction type	Frequency
A	0.1
В	0.2
С	0.5
etc.	

The fraction for transaction A in the "Frequency" column indicates that in 1,000 transactions, 100 of them will be type A.

More generally, it indicates that, in a given number of transactions (such as 1,000), what fraction of that given number will be the transaction indicated.

The Answer has not shown this in DeLeo. The Answer merely asserts that the advertising is selected based on (1) the type of transaction undertaken by the customer and (2) the sponsor's instructions.

This shows nothing more than, if the sponsor is a car dealer, showing an advertisement for a car, when a customer deposits more than \$ 1,000.

That fails to show the claim recitation of a "statistical distribution."

Point 2

The last sentence of this section of the Answer ("Furthermore . . . claim limitation.") is invalid, for several reasons.

REASON 1

The Answer interprets a "statistical distribution" as being a number between 0 and 1. That is simply false.

A "statistical distribution" is data of the type shown in Point 1, above. It indicates relative frequency of events.

For example, a statistical distribution of grades in a school class might be

Grade	Percent of Students
А	5 .
В	15
С	70
D	5
F	5.

This means that 5 percent of the students earned A's, 15 percent earned B's, and so on.

A "statistical distribution" as claimed is not a single number, as the Answer asserts.

REASON 2

It makes no sense to assert that the "type of transaction" undertaken by a customer has a value of "1," thereby causing selection of a specific advertisement.

The reason is that, in DeLeo, **different** transactions cause **different** advertisements to be selected. What are the "values" of the other transactions? And why do those "values" cause different advertising to be selected?

Under the Answer's reasoning, those "values" must also be "1."

But that is impossible under the Answer's suppositions. If all values are "1," then the same advertisement would be selected in all cases. That makes no sense.

From another perspective: the Answer's "range value of 0 to

1" clearly attempts to refer to a frequency, or probability. However, the Answer states that its exemplary advertisement is assigned a value of "1." A probability of "1" means that this advertisement occurs all the time. All other advertisements must be assigned a value of zero. That also makes no sense.

The claimed "statistical distribution" has not been shown in the reference.

Reply to Answer, page 19 (Dependent Claims 14 and 15)

The discussion of claims 7 and 8, above, apply to claims 14 and 15.

Reply to Answer, Pages 17 - 18 (Independent Claim 9)

The discussion of double-counting, given above in connection with claim 7, applies here.

No claimed "environment data," which is distinct from the claimed "advertisement(s)," has been shown in DeLeo. The Answer is using the advertisements in Deleo as showing both claim elements. That is double-counting.

The Answer's discussion on page 18 does not rebut the arguments of the Brief. The Answer merely sets forth supposed characteristics of Deleo, but those do not show the claim recitations in question.

Independent claim 9 is also discussed in the following

section.

Reply to Answer, Pages 12 - 14 (Independent Claim 1)
Reply to Answer, Pages 17 - 18 (Independent Claim 9)
Reply to Answer, Pages 20 - 21 (Independent Claim 16)
Reply to Answer, Page 22 (Independent Claim 22)

Claim 1(a) recites:

(a) collecting environment data related to the environment of each terminal including the nature of businesses nearby the terminal.

Claims 9 and 16 contain a similar recitation. Claim 22 contains a similar recitation, with the exception that it does not state that the "environment data" includes the "nature of businesses nearby."

Point 1

Appellant points out that claims 1, 9, and 16 recite two types of "environment data."

- -- Type 1 is "environment data related to the environment of each terminal."
- -- Type 2 is data describing "the nature of businesses nearby the terminal," which, under the claim structure, is a subset of Type 1.

The Answer treats the advertising in Deleo as showing Type 2. But the Answer fails to show Type 1.

Thus, the "environment data," as claimed, which "relates to" the environment of the terminal, has not been shown in DeLeo.

It may be possible that, in some situations, Type 2 data could show "the environment of each terminal" as required for Type 1 data. However, this possibility has not been shown to exist in DeLeo.

One reason is that the Answer only refers to a couple of businesses in DeLeo which perform the advertising. One is a fast food restaurant. Another is a movie theatre.

Appellant fails to see how advertising for two businesses can show "the environment of each terminal" as claimed.

Therefore, even if Type 2 data is shown in DeLeo, by way of his advertising, no Type 1 data has been shown.

Consequently, the complete recitation of claim 1(a), 9(a), and the first paragraph of claim 16, have not been shown in DeLeo.

As to claim 22, as just explained, the advertising of DeLeo has not been shown to "describe" the "environment" as claimed.

Point 2

The Answer asserts that the advertising of DeLeo necessarily describes businesses nearby the terminal. The Answer asserts that it would be "worthless" or "pointless" to present advertising for businesses which are not near the terminal.

Appellant points out that these assertions defy common sense,

and are contradicted by Deleo's own statements.

COMMON SENSE

As to common sense, everybody in the U.S. has seen advertisements for Crest Toothpaste on television. But those advertisements do not identify a specific location where you can purchase the toothpaste.

Everybody has seen advertisements for Chevy Trucks. But the advertisements merely say "See your local Chevy dealer."

These two examples clearly show that some advertising is done without regard to location where the advertising is presented.

These two examples show that some advertising is designed to implant an idea in the mind of the viewer, and not to direct the viewer to a nearby business.

Therefore, there is no reason to suppose that the sponsors of the advertising in Deleo are necessarily located near the terminal presenting the advertising.

DeLEO's STATEMENTS

The claims state that the Type 1 data (of which Type 2 is a subset) indicates the "environment" of each terminal.

The Answer asserts that Deleo's advertising qualifies as such "data."

However, Deleo operates a fleet of terminals. (Column 3,

top.) He receives advertising from sponsors, and stores the advertising in database 44 in his Figure 2. (Column 4, line 52 et seq.)

Appellant can find no discussion in Deleo which states that this advertising indicates an "environment" of any specific terminal.

It may be that a given piece of advertising is sent to one terminal, and not to another. (Column 5 generally.) But that does not mean that the advertising indicates, or describes, the environment of the recipient terminal.

This conclusion is supported by the fact that Deleo states that the same advertising can be sent to multiple computers.

(Column 5, top.) In such a case, it would be impossible for that advertising to describe the "environment" of all the computers.

Point 3

The Answer asserts that the claimed "environment data" is "implicit" in DeLeo. (Page 13, line 7, for example.)

That assertion admits that the claimed "environment data" is not shown explicitly in DeLeo, but is "inherent" in the patent sense.

MPEP § 2112 states:

EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY.

In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teaching of the applied prior art.

The Answer has failed to show the required "basis in fact and/or technical reasoning" which shows that the advertising in DeLeo necessarily shows the "nature of businesses nearby the terminal."

Further, as explained above, that would only show Type 2 "data." The Answer must also show that the advertising in Deleo shows the claimed "environment data," which "is related to" or "describes" (depending on the claim) the "environment of EACH terminal."

Point 4

Appellant emphasizes that claim 1 states that the "environment data" is "related to the environment of **EACH** terminal."

If the advertising of DeLeo is to show that, then **different**advertising must be used for each terminal (unless the environment of all terminals is the same). But, as explained above,

-- sometimes DeLeo shows different advertising at different terminals and

-- sometimes DeLeo shows the same advertising at different terminals.

That is inconsistent with the Answer's assertion that DeLeo's advertising necessarily describes businesses in the vicinity of each terminal.

A similar comment applies to claims 9, 16, and 22.

Reply to Answer, Page 15 (Dependent Claim 4) Reply to Answer, Pages 18 - 19 (Dependent Claim 11)

The Answer has completely changed the basis for the rejection, so its attempted rebuttal of the Brief is not relevant.

The reason is that the Answer now asserts that the "environment data" of parent claim 1 lies in the advertising of DeLeo. The Final Rejection did not assert this, so the Brief did not address it.

Claim 4 recites:

4. A method according to claim 1, wherein the data is collected and stored in real time or near real time.

The "data" of claim 4 includes the "environment data" of claim

1. An example of one form of the invention will provide context

for understanding claim 4.

Assume that the claimed terminal is near a football stadium.

"Environment data" collected in "real time" can tell that a

football game is in progress. That fact can affect the advertising which is presented.

However, the term "real time" has no relevance to the "collecting" of the advertising in DeLeo. That advertising, if "collected" at all, is "collected" when the advertisers deliver it to DeLeo's system, whereupon it is stored in database 44 in Deleo's Figure 2. From there, it is delivered to the terminals, according to DeLeo's rules.

There is no "real time" "collection" of the advertising in DeLeo. One clear meaning of "real time" is concurrently with "environment" which the "data" is supposed to indicate.

Any "collection" in Deleo is independent of any "environment" of his terminal.

"Real time" is technical jargon for an operation which occurs along with something else. What, in DeLeo, occurs along with his collection of the advertising for storage in database 44 ? Nothing relevant.

This applies to claim 11.

Reply to Answer, Page 21 (Dependent Claim 17)

Point 1

Parent claim 16 states that the "data warehouse" is operable to provide "information" in "real time . . . for selecting advertisements."

According to the Answer's interpretation of DeLeo, the advertisements themselves provide this "information," which is then used to select the advertisements. That cannot be so, as explained above, because of double-counting.

Thus, since parent claim 16 has not been shown, dependent claim 17 cannot be rejected.

Point 2

Under the preamble of claim 16, the "data warehouse" is different from the "terminals." The elements recited in claim 16 set forth operations which the "data warehouse" undertakes.

Thus, the "means" of claim 17, in being part of the "data warehouse," is not within the terminals.

The apparatus in DeLeo which the Answer uses to show the "means" of claim 17 is within a terminal.

Thus, claim 17 is not shown in the reference.

Reply to Answer, Page 21 (Dependent Claims 19 and 20)

The discussion of claims 7 and 8, above, apply here.

Reply to Answer, Page 22 (Dependent Claim 21)

The Answer re-writes the claim, and then asserts that the claim, as re-written, is found in DeLeo. That is not allowed.

In simple terms, claim 21 wants to identify the transactions

which occur at a terminal when an "event" is going on.

More precisely, claim 21 recites an "event." It states that a "means" determines which "transactions" occur at specified terminals, within a time period of the "event"

The Answer cites DeLeo, column 5, lines 26 - 30 as showing this. That passage does not show this, but merely states that DeLeo's terminals display certain advertising, at certain times.

The Answer cites DeLeo, column 5, line 44 - column 6, line 7, to show this. That passage also does not show this, but merely sets forth methods of selecting advertising for a customer.

Both cited passages of DeLeo concern (1) when advertising is displayed to customers and (2) which advertising is displayed.

But the claim does not recite that. It is concerned with ascertaining what types of transactions occur at about the same time as an "event."

That operation has not been shown in DeLeo.

Reply to Answer, Page 22 (Dependent Claims 22, 24, 25, and 26)

The discussion above applies here.

Reply to Answer, Pages 22 - 23 (Independent Claim 27)
The Brief, and this Reply, address the Answer.

Reply to Answer, Page 23 (Dependent Claim 28)

The Brief addresses this.

Reply to Answer, Page 23 (Dependent Claim 29)

The claim states that data is stored which indicates both

- 1) the type of advertising displayed and
- 2) the transaction during which the advertising was displayed.

The "play log" of DeLeo does not show that. (Column 8, lines 28 - 43.)

Appellant points out that this absence makes sense. In the case of an ATM, the types of transactions occurring are known to the bank operating the ATM. That information, ordinarily, is sensitive, and would not be shared with the sponsor of the advertising in DeLeo.

Reply to Answer, Pages 24 - 25 (Dependent Claim 3)

The Brief addresses this.

Appellant points out that the Answer merely sets forth standard rules on the need for a teaching for combining references, and then concludes, without evidence, that the rules have been followed.

Reply to Answer, Pages 25 - 26 (Dependent Claim 5)

Claim 5 depends ultimately on claim 1. As explained above, the Type 1 "data" has not been shown in DeLeo.

The rationale given by the Answer is expressly prohibited by the MPEP. The rationale (page 26, second sentence, "Since all claimed . . . time of the invention.") is prohibited by MPEP § 2143.01, which states:

FACT THAT REFERENCES **CAN BE COMBINED** OR MODIFIED IS NOT SUFFICIENT TO ESTABLISH PRIMA FACIE OBVIOUSNESS

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.

. . .

FACT THAT THE CLAIMED INVENTION IS **WITHIN THE CAPABILITIES** OF ONE OF ORDINARY SKILL IN THE ART IS NOT SUFFICIENT BY ITSELF TO ESTABLISH PRIMA FACIE OBVIOUSNESS

A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references.

Appellant points out that these MPEP rules have not been changed by the KSR decision rendered by the Supreme Court. (KSR

International Co. v. Teleflex Inc., 550 U.S. 1 (2006))

The reason is that, in KSR, all claim elements, except one, were found in a single reference A. Another reference expressly stated that the missing element should be used in a system of the type described in the single reference A.

Thus, all teachings required to obtain the invention in KSR were found in the prior art. There was no resort to the "skill in the art."

Reply to Answer, Pages 26 - 27 (Dependent Claim 6)

Point 1

Under the claim, the "transaction" which is "coincident" is the "transaction" which the advertising is intended to promote.

For example, assume a Coke machine, which dispenses Coke and other drinks. Assume that the Coke machine advertises Coke, but not the other drinks.

If the claim is to be applied to this situation, then the claim inquires how often the advertisement prompts a user to buy Coke, as opposed to the other drinks, and whether that prompting succeeds.

The Answer has not shown this in the references.

Point 2

DeLeo discusses evaluating the success of the advertising.

(Column 8, lines 41 - 43.)

Calvey is cited as showing measuring the effectiveness of advertising.

No teaching has been advanced explaining why Calvey's approach should replace Deleo's.

Point 3

Claim 6, through parent claim 5, states that a query of the "data warehouse" is used in determining the effectiveness of the advertising.

No "data warehouse," as claimed, is seen in Calvey.

Thus, Calvey cannot show the claimed effectiveness measurement, which involves the "data warehouse."

Reply to Answer, Page 27 (Dependent Claim 10)

The discussion of claim 3 applies here.

Reply to Answer, Pages 27 - 28 (Dependent Claim 12)

The discussion of claim 6, above, applies here. Calvey shows no query of the "data warehouse," as claimed.

Reply to Answer, Page 28 (Dependent Claim 13)

The discussion of claim 6 applies here.

Reply to Answer, Page 28 (Dependent Claims 18 and 23)

The discussion of claim 6 applies here.

CONCLUSION

Appellant requests that the Board overturn the rejections, and pass all claims to issue.

Respectfully submitted,

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